

# Virtual Inputs

A virtual input is an input that exists only in software. You would never wire to a virtual input. A virtual input can be programmed to go abnormal based on an event rather than on the change of state of an input.

Virtual inputs are available for all panel types being used with Manage, CA450,CA195,CA295,CA495 and CA2000 hosts.

There are 4 categories of virtual inputs and these have undergone an evolution as a result of customer feedback. Therefore, in the Manage and CA450 hosts, the virtual input categories, in order are:

1. Forced Door/ Door Open Too Long
2. Valid Tracked Card
3. Denied Card
4. Void Card

Note that the Forced Door and Door Open Too Long alerts are combined into 1 virtual input in this version. The difference between a Denied card and a Void Card is that a denied card is denied based on programming ( i.e. access level or time schedule), whereas a void card is one that was NEVER programmed into the system.

There was a large demand to have Forced Door separate from Door Open Too Long. Continental complied with this demand in the CA195,295,495 and 2000 programs. With these hosts, the virtual inputs are as follows. Again, these are listed in order.

1. Forced Door
2. Valid Tracked Card
3. Denied Card/ Void Card
4. Door Open Too Long

These inputs can be used in link programs to fire a relay in response to one or all of these categories on a per door basis. This could be used to sound a horn for a forced door or trip a camera for a denied card.

## MAPPING

Virtual inputs are mapped differently on each type of panel, and in the case of the Smarterm, depends on the number of expansion boards that are connected to the panel.

The following table shows the virtual input mapping for a Smarterm

Door #	Category	Input # with No Expansion Boards	With 1 Expansion Board	With 2 Expansion Boards	With 3 Expansion Boards
1	Forced Door	17	33	49	65
	Valid Tracked Card	18	34	50	66
	Denied/Void Card	19	35	51	67
	Door Open Too Long	20	36	52	68
2	Forced Door	21	37	53	69
	Valid Tracked Card	22	38	54	70
	Denied/Void Card	23	39	55	71
	Door Open Too Long	24	40	56	72
3	Forced Door	25	41	57	73
	Valid Tracked Card	26	42	58	74
	Denied/Void Card	27	43	59	75
	Door Open Too Long	28	44	60	76
4	Forced Door	29	45	61	77
	Valid Tracked Card	30	46	62	78
	Denied/Void Card	31	47	63	79
	Door Open Too Long	32	48	64	80

Input 81 is Always reserved as the Tamper input.

Virtual inputs are lost if a 4<sup>th</sup> expansion board is added.

Virtual Inputs are fixed on the Superterm starting with input 49

Reader #	Category	Input#
1	Forced Door	49
	Valid Tracked Card	50
	Denied/Void Card	51
	Door Open Too Long	52
2	Forced Door	53
	Valid Tracked Card	54
	Denied/Void Card	55
	Door Open Too Long	56
3	Forced Door	57
	Valid Tracked Card	58
	Denied/Void Card	59
	Door Open Too Long	60
4	Forced Door	61
	Valid Tracked Card	62
	Denied/Void Card	63
	Door Open Too Long	64
5	Forced Door	65
	Valid Tracked Card	66
	Denied/Void Card	67
	Door Open Too Long	68
6	Forced Door	69
	Valid Tracked Card	70
	Denied/Void Card	71
	Door Open Too Long	72
7	Forced Door	73
	Valid Tracked Card	74
	Denied/Void Card	75
	Door Open Too Long	76
8	Forced Door	77
	Valid Tracked Card	78
	Denied/Void Card	79
	Door Open Too Long	80

If more than 1 expansion board is added, virtual inputs are lost .

Virtual Inputs are also fixed on both the Miniterm and the Microterm starting with input # 17.

Reader #	Category	Input#
1	Forced Door	17
	Valid Tracked Card	18
	Denied/Void Card	19
	Door Open Too Long	20
2	Forced Door	21
	Valid Tracked Card	22
	Denied/Void Card	23
	Door Open Too Long	24

Virtual Inputs are a very powerful and effective programming tool and can be used to solve a great deal of cardaccess problems. For more information on this or any other feature of Continental Instruments system programming, please feel free to contact us at [Techhelp@ciaccess.com](mailto:Techhelp@ciaccess.com).